ABSTRACT

Polymerizable compositions for making transparent polymeric substrates, resulting transparent polymeric substrates and the applications thereof in optics

The composition comprises:

- from 35 to 70 parts by weight of one or more monomers (I) of formula:

$$R_1$$
 R_2 | $CH_2 = C - C - O - A - C - C = CH_2$ | $CH_2 = C - C - O - A - C - C = CH_2$

wherein

R₁ and R₂ represent H or CH₃,

A is a divalent moiety of formula:

-(-CH₂-CH₂-CH₂O-)
$$_{m1}$$
 or -(-CH₂-CH-O-) $_{m2}$ | CH₂

m1 and m2 each are an integer in the range of 4 to 20,

- from 5 to 50 parts by weight of a monomer (II) comprising at least a urethane unit and at least two (meth)acrylate functions, and
- from 5 to 40 parts by weight of a monomer (III) with a high Abbe number and comprising one or more methacrylate functions, the total of the monomers (I), (II) and (III) representing 100 parts by weight.

Application to the manufacture of optical and ophthalmic items.